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Federal Communications Commission
Office of the Secretary

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matters of:	)	
	)	
Telocator Petition for	)	RM - 7617
Rulemaking to Amend Part 22	)	
of the Commission's Rules	)	
Concerning the Use of 930-931	)	
MHz For An Advanced	)	
Messaging Service	)	

COMMENTS OF
MOBILE TELECOMMUNICATION TECHNOLOGIES CORPORATION

Mobile Telecommunication Technologies Corporation ("Mtel"),[1/] by its attorneys, hereby submits its comments in support of the above-captioned petition, requesting that the Commission allow the use of 930-931 MHz for a new Advanced Messaging Service ("AMS").[2/] For the reasons set forth below, Mtel submits that the public interest would be affirmatively served by expeditious and favorable action on Telocator's request, and Mtel therefore supports the Telocator proposal.

1/ MTel and its subsidiaries provide a number of high-technology wireless communications services, holding licenses, or interests in licenses, in the nationwide paging service, the public air-to-ground service for general aviation, the mobile satellite service, the radiodetermination satellite service, specialized mobile radio services, and various marine radio services. MTel also is the cellular non-wireline tentative selectee in the Wisconsin 2 - Bayfield RSA, and has pending an application for a license to provide PCN service in the Dallas/Fort Worth area on an experimental basis. Accordingly, Mtel is uniquely positioned to provide the Commission with informed comment on the Telocator proposal.

2/ Telocator Petition For Rulemaking to Amend Part 22 of the Commission's Rules Concerning the Use of 930-931 MHz for an Advanced Messaging Service, Report No. 1836 (Feb. 7, 1991) ("Telocator Petition").

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List A B C D E

I. THE CONSUMER MARKET FOR ONE-WAY COMMUNICATIONS REQUIRES ADDITIONAL SPECTRUM

As Telocator recognizes, one-way communication is no longer a simple beeper service.[3/] Conventional pagers already have achieved an enviable penetration in the business market, and demand nonetheless appears insatiable as new paging uses are found.[4/] As pager prices have dropped, pagers also have begun to appear in the consumer market. Thus far, the paging industry has been able to accommodate new demand for existing spectrum by expeditiously deploying faster transmission technologies and superior signalling formats. Nonetheless, the industry is rapidly approaching its capacity to accommodate ever growing demand.

The paging market has also changed in other respects. Increasingly, purchasers of one-way communications services have become more sophisticated, and they have rapidly absorbed the "advanced" features introduced by providers to date. For example, customers clearly perceive the benefits of numeric and alphanumeric technology. Similarly, customers have demanded nationwide and regional paging services. In this regard, Mtel's

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3/ Telocator Petition at 4.

4/ Many customers, for example, use paging as a complement to cellular telephony. Mtel, like Telocator, also sees paging as a useful adjunct service with new PCN applications. Telocator Petition at 11-12. See also Mtel PCN application File No. 1692-EX-PL-90.

SkyTel subsidiary, the only common carrier licensee in the nationwide paging service to construct and operate a true nationwide system, had 84,000 pagers in service as of December 31, 1990, and is already experiencing capacity constraints in this service. Even conventional voice paging, which as Telocator properly notes, lacks the convenience of store and replay capability,[5] has experienced a substantial market demand and limited spectrum capacity with which to accommodate it.

II. AN ALLOCATION FOR AMS IN A 930-931 MHZ BAND IS BOTH NECESSARY AND CONSISTENT WITH PRIOR COMMISSION DETERMINATIONS REGARDING USE OF THIS BAND

Telocator's proposal to implement AMS in the 930-931 MHz band is fully consonant with the Commission's future development plans in reserving that spectrum for "advanced technology paging."[6] Although the Commission's 1982 characterization of "advanced technology paging" was necessarily limited by technology foreseeable in 1982, and did not expressly discuss all of the concepts included in the Telocator proposal, the fundamental concept proposed by Telocator is wholly consistent with the Commission's determination to reserve this spectrum in

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5/ Telocator Petition at 9.

6/ Amendment of Parts 2 and 22 of the Commission's Rules to Allocate Spectrum in the 928-931 MHz Band and to Establish Other Rules, Policies, and Procedures for One-Way Paging Stations in the Domestic Public Land Mobile Radio Service, 89 F.C.C.2d 1337 (1982).

order to permit deployment of a newer generation of technically advanced one-way communications.7/

Further, Mtel agrees with Telocator's comments noting a host of problems associated with attempting to deploy AMS within existing paging allocations. It is beyond question that there is substantial congestion within presently allocated paging bands that would preclude the introduction of AMS. Moreover, although efficient when compared to other communications services, AMS has a much higher information transmission requirement than conventional paging and a correspondingly lower ability to accommodate the vast number of customers served, for example, on a single channel used for tone-only or display paging. Thus, the allocation of 930-931 MHz would prevent further congestion on existing paging frequencies while permitting orderly development of AMS.

Second, many of the existing paging channels are unsuitable for deploying AMS due to the particular propagation characteristics of the spectrum bands which they occupy. The 43 MHz channels, for example, have severe building penetration problems and signal "skipping" problems. Such characteristics render these channels useless for high speed AMS applications.

7/ Indeed, Telocator's proposals are far more consistent with the Commission's determination to establish a spectrum reserve for high technology paging than are any other pending proposal for use of this spectrum.

Finally, as Telocator has noted, to maximize the potential viability of AMS, carriers should be free to develop a technical infrastructure tailored to the needs of a new generation of one-way communications. Telocator has listed a number of factors--including different modulation methods, transmitter power requirements, transmitter site location and design strategies, and higher information densities (requiring more accurate equalization by an order of magnitude or more) -- that could cause difficulties in implementing AMS on conventional channels, or even preclude AMS deployment entirely.[8/]

III. THE COMMISSION MUST PROVIDE CARRIERS MAXIMUM FLEXIBILITY TO PROVIDE AMS

Mtel also concurs with Telocator that a flexible regulatory regime for AMS would be in the public interest. If the Commission can formulate, with the help of the industry, a minimal infrastructure for AMS that governs height, power, and interference, Mtel believes providers will respond with the innovation that has characterized paging in the past. Flexible regulation by the Commission would allow individual carriers to assess market preferences and needs, foster healthy and robust competition, and ultimately, benefit communications customers.

8/ Telocator Petition at 15-16.

IV. CONCLUSION

The paging industry continues to evolve, with new and exciting technical innovations becoming possible on a continuing basis. In order to permit the public to benefit from technological breakthroughs, the Commission should make spectrum available for this purpose. Spectrum currently allocated for paging simply does not have the capacity necessary to facilitate this high-technology transition. The 930-931 MHz spectrum, which the Commission has already reserved for services such as AMS, can and should be easily allocated for such use.

Mtel supports the Telocator proposal to allocate this spectrum for AMS because Mtel believes such action would further the public interest.

Respectfully submitted,

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